MT9505-P/Px, MT9503-P/Px QUICK USER MANUAL

We would like to thank you, because you have choosen MT95XX-P or MT95XX-Px.

IMPORTANT : BEFORE OPERATING THE FURNACE, OPERATING MANUAL MUST BE READ CAREFULLY.

1.-DEFINITION:

Magmatherm MT95XX-P and MT95XXPx are laboratory type heating furnaces. Heating is performed up to 950oC. This temperature is maximum, at the same time, continious working temperature of these furnaces.

2-SAFETY:

Magmatherm heating furnace may harm operating people or surrounding any other materials, unless this operating manual is applied during operating process. Thus;

-Periodical maintenance should be applied.

-Cautions against accidents should be main concern of operators.

-All operating directives, warnings and recommendations in this operating manual have to be followed and applied carefully.

Unless operating directives, warnings and recommendations in this operating manual are followed and applied, company TETRA ISI SİSTEMLERİ LTD. ŞTİ. is not dedicated for the accidents that may occur.

2.1.- OPERATION IN SAFE CONDITIONS

Magmatherm, can reach up to 950oC

-Furnace is not started, if there is any living thing in the chamber
-Any burning, flammable, exploding, poisoning, (Benzene, LPG, Acetylene etc.) material that may harm when it is heated etc is not stored or put inside the chamber. These types of materials should be kept away from the furnace.
-Outside case of the furnace may be hot. When the furnace is heated you shouldn't touch to outside without gloves.
-Instant high heat should be considered, when the front door is open.
-Electronic and/or Electrical components may create induction current or magnetic field. It may harm any electronic equipment surrounding the furnace. Especially cardiac pacemaker users should be away from the furnace.
-It should not be operated in closed environments such as in cupboard etc.
-Furnace should not be operated by multi plug in tools. It should be operated by stationary plugs which are mounted on the wall.
-Electricity plug have to be grounded.

3.- FIRST HEATING

Following conditions should be considered, directions must be applied step by step, and the importance of the first heating process should be kept in mind, when Magmatherm Furnace is operated and heated up for the first time.

3.1- Enough free field, surrounding the furnace should be kept. Recommended distance is minimum 30 cm. This free space will increase the furnace performance because of air circulation. At the same time, any fire or explosion danger which may occur due to any material left around the furnace. **Please don' t forget**, when the furnace reaches to high temperatures, the surface of the furnace reaches to high temperatures too. Any flammable and explosive material which is close to furnace can be a reason for the fire or explosion danger.

3.2 – Electricity plug should have proper ground connection and plug should have proper capacity (Cable thickness) according to maximum amper of the furnace.

3.2- Some gas and fumes due to some chemicals which is used on the electronic parts, in the isolation materials and due to outer furnace surface paint can be harmful if it is breathed directly, during the first heating process. Protective glasses and breathing masks should be definitely used, during first heating and very good air circulation in the working room should be kept.

3.3- During the first heating up process, furnace should be heated up according to following temperature-time table

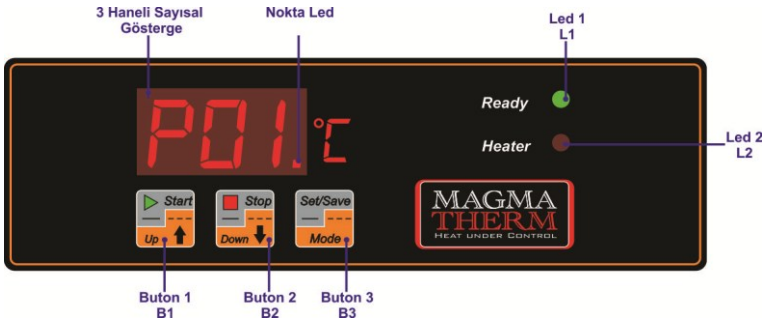
Heating up to 950 ^{o}C

Waiting for 1 hour

This procedure can be completed by Magmatherm Programs easily.

Please don' t touch furnace without gloves, especially during first heating process, due to hot surfaces.

4.- KEYPAD & MENU



Control panel includes 3 buttons (B1, B2, B3), green led and red led (L1, L2) and 3 digit display.

If you see green led (L1) is on, your furnace is ready to start without any problem and the red light (L2) starts , if you start to heat the furnace. When the heating ends, the red led also turn off.

Sound warning is the indication of starting the heating, level changes and finishing the heating procedure.

User interface (Key pad) has two different mode. First one is to understand the status/conditions of the furnace. Point led is turned off duruing the status mode. Unless you press a button, inner temperature is indicated on the display. If you start to heating and if you press B1 or B2, heating level and heating program can be followed via display.

3.1 Start & Stop for Heating

Heating is started, if you press 3-4 seconds ''START'' (B1) button during the Point Led is turned off.Fırın ısıtmaya nokta led yanmaz iken "Start" (B1) butonunu uzun basarak başlatılır. Sound warning indicates the initiation of heating and working program number is displayed for 3 seconds and main display is followed. (That means inner temperature is displayed automatically) At the same time red led (L2) is turned on.

If B1 button is pressed short, actual level of hetaing procedure is displayed for 2 seconds, these are;

1- First level heating

2-First level waiting

1- Second level heating

2-Second level waiting

It is possible to change the program parameters, even the heating continiues. But ofcourse this is valid for the coming steps.

Heating is stopped, if you press ‘’STOP’’ (B2)button long. (3-4 seconds). Sound warning indicates that you stop the furnace and red led (L2) is turned of.

3.2 Folowing, Entering & Changing Parameters.

Second mode is to follow and to change the parameters of the heating procedure. Point led at the right bottom of display is turned on.

This mode is initiated when B3 is pressed short. If up or down arrows (B1 & B2) are pressed when the point led is turned on, you follow the each parameters of the program. Parameter which is wanted to be displayed appears and one second later set value appears at the display. B1 and B2 buttons are used to display other parameters.

Parameter can be changed, if B3 button is pressed long and the value starts to blink. B1 and B2 are the buttons to decrease or increase the values. To save the value, B3 is pressed long again while the value is blinking. The value is not saved, if B3 button pressed short and blinking is stopped.

3.3 MENU

P00 mode activates the program which will be displayed and set. Activated menu options depending on the selection of P00 are shown here-below. Parameters of any other program can be changed by changing P00, while the selected program is working.

3.3.1 MT9505-P & MT9503-P Menu

Parameter No	Parameter Detail	Value Range
P11	SET VALUE TEMPERATURE [C] 1 st PROG 1 st. STEP	50 - 950
P12	SET VALUE WAITING TIME [Min.] 1 st PROG 1 st. STEP	1 - 999
P15	HEATING RATE [C/min]	5 - 25

Parameters above can be set for MT9505-P model. Parameter selection mode appears when the B3 button is pressed (Point led at the bottom right turnes on .) and working temperature P11, waiting time P12 and heating rate P15 selection can be implemented.

3.3.1 MT9505-Px & MT9503-Px Menu

MT9505-Px & MT9503-Px menu is different depending on P00 selection as follows,

IF P00 "1"

Parameter No	Parameter Detail	Value Range
P00	Program Selection	1-2
P01	Program No (Selected)	
P02	Step No	1- 4
P03	Cumulative Working Hour / 10	
P11	VALUE TEMPERATURE [C] 1 st PROG 1 st. STEP	50 - 950
P12	VALUE WAITING TIME [min.] 1 st PROG 1 st. STEP	1 - 999
P13	SET VALUE TEMPERATURE [C] 1 st PROG 2 st. STEP	50 - 950
P14	VALUE WAITING TIME [min.] 1 st PROG 2 st. STEP	1 - 999
P15	HEATING RATE [C/min]	3 - 20

IF P00 "2"

Parametre No	Parameter Detail	Value Range
P00	Program Selection	1-2
P01	Program No (Selected)	
P02	Step No	1- 4
P03	Cumulative Working Hour / 10	
P21	VALUE TEMPERATURE [C] 2 st PROG 1 st. STEP	50 - 950
P22	VALUE WAITING TIME [min.] 2 st PROG 1 st. STEP	1 - 999
P23	SET VALUE TEMPERATURE [C] 2 st PROG 2 st. STEP	50 - 950
P24	VALUE WAITING TIME [min.] 2 st PROG 2 st. STEP	1 - 999
P25	HEATING RATE [C/min]	3 - 20

Any other parameter set can be made, while the selected program is working. It does not affect the behaviour of working program.

3.4 Buttons

	Status Mode		Heating Mode		Parameter Mode		Parameter Set	
Buton	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press	Short Press	Long Press
B1	Not Applicable	Start	Step No	Program No	Parameter Advance	Parameter Advance	Increase the Value	Decrease the Value
B2	Not Applicable	Not Applicable	Not Applicable	Stop	Parameter Back	Parameter Back	Increase the Value	Decrease the Value
B3	Parameter Mode	Not Applicable	Parameter Mode	Not Applicable	Status Mode	Parameter Selection	Out without saving	Saving

4.- ENERGY CUT OFF & FURNACE BEHAVIOUR

Working program continues to work, if the energy cut off occurs and supplied again.

5.- TECHNICAL INFORMATION

Brand	Magmatherm
Model	MT9505-P/MT9503-P
Software version	v12
Maximum Working Temperature	950 °C
Continious Working Temperature	950 °C
Power	1,35 kW
Voltage	220 V
Maximum Amperage	7 A
Frequency	50 Hz.
Inner Dimensions (W x H x D)	MT9505-P 15 x 15 x 23 [cm]
	MT9503-P 11,5x11,5x23 [cm]
Waranty	2 year